

06/23/2003 MON 10:27 FAX 12489888363 Carlson, Gaskey & Olds

001/006

60,469-031
OT-4791

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Gieras, et al
Serial No.: 09/740,231
Filed: 12/18/00
Group Art Unit: 2834
Examiner: Elkassabgi, Heba
Title: METHOD OF MAKING TRANSFER FLUX MOTORS

RESPONSE

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Box AF
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

JUN 23 2003
TECHNOLOGY CENTER 2800

Dear Sir:

This paper is responsive to the Office Action mailed on April 24, 2003. Please amend the application as follows:

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IN THE CLAIMS

1-9. (Cancelled)

10. (Currently Amended) A motor assembly comprising:

a stator having first and second stator core portions and a coil nestingly supported between the core portions such that at least part of axial surfaces on the coil are covered by the core portions;

a rotor having a core and a plurality of magnets, the stator and rotor being supported to allow for relative rotary motion between the rotor and the stator such that the plurality of magnets of the rotor interact with the stator core portions during such relative rotary motion.

11. (Original) The assembly of claim 10, including two support members that enclose at least part of outward axial surfaces of the core portions.

12. (Original) The assembly of claim 11, including a plurality of magnetic core members supported by the support members.

13. (Original) The assembly of claim 12, including a plurality of slots on the support members and wherein the magnetic core members are received in corresponding ones of the slots.

14. (Original) The assembly of claim 10, wherein each stator core portion comprises sintered powder material.

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15. (Original) The assembly of claim 10, wherein each stator core portion comprises a laminated ring.

16. (Previously Amended) The assembly of claim 10, wherein each stator core portion includes a generally annular ring and a plurality of circumferentially spaced projections that project radially inward from the ring.

17. (Original) The assembly of claim 16, including two support members with a plurality of radially inwardly projecting spacer portions and wherein the stator core portion projections and the spacer portions are interspersed such that outward axial surfaces on the core projections are not covered by the support members.

18. (Previously Amended) The assembly of claim 17, including a plurality of slots in the support members and at least one magnetic core member inserted into each of at least some of the slots.

19. (Previously Amended) The assembly of claim 10, including a bonding agent on the stator that bonds the stator core portions together.

20. (Previously Added) The assembly of claim 10, wherein the stator coil axial surfaces are completely covered by the stator core portions.

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21. (Previously Added) The assembly of claim 10, wherein the stator coil comprises a prewound coil that is inserted between the stator core portions.

22. (Previously Added) A motor assembly, comprising:

a stator having first and second stator core portions and a coil supported between the core portions such that at least part of the axial surfaces on the coil are covered by the core portions, each stator core portion including a generally annular ring and a plurality of circumferentially spaced projections that project radially inward from the ring, and including two support members with a plurality of radially inwardly projecting spacer portions, the stator core portion projections and the spacer portions being interspersed such that outward axial surfaces on the core projections are not covered by the support members; and

a rotor having a core and a plurality of magnets, the stator and rotor being supported for relative rotary motion between the rotor and the stator such that the plurality of magnets of the rotor interact with the stator core portions during such relative rotary motion.

23. (Previously Added) The assembly of claim 22, including a plurality of slots in the support members and at least one magnetic core member inserted into each of at least some of the slots.

REMARKS

Applicant thanks the Examiner for the remarks and analysis contained in the most recent Office Action. Claim 10 is amended above in response to the objection to that claim raised in the Office Action. Applicant thanks the Examiner for the indication of allowed and allowable subject matter. Claims 10-23 are still pending in this application. Applicant respectfully requests reconsideration of this application.

Claim 19 was rejected under 35 U.S.C. §112. Applicant respectfully submits that the bonding agent is appropriately recited in the claim. An example bonding agent is disclosed on page 6, line 1, which is described as "an epoxy resin." As also stated in the specification, other bonding methods may be used.

Applicant respectfully submits that claim 19 is clear.

Claims 10 and 16 were rejected under 35 U.S.C. §102(b) as being anticipated by *Lange*. Applicant respectfully traverses the rejection. Applicant respectfully disagrees with the Examiner's interpretation of *Lange*. Figure 1 does not disclose core portions (6 and 7) in which a coil winding (8) is situated, as suggested by the Examiner. Instead, the portions 6 are soft iron elements that are part of the pole body structures 4 of the motor shown in Figure 1 of the *Lange* reference. The end ring 8 is not a coil and is not nested between the elements 6 and 7. The element 7 is an intermediate ring between the soft iron elements 6 and the permanent magnets 5 of that motor design. Therefore, there is no anticipation.

Claims 11, 12, 14, 15 and 21 were rejected under 35 U.S.C. §103 based upon *Lange* combined with at least one other reference. The *Lange* reference does not disclose what the Examiner states in the Office Action and none of those claims can be considered obvious. Even if the proposed combinations could be made, the result is not the same as the claimed invention.

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Applicant respectfully submits that this case is in condition for allowance. If the Examiner believes that a telephone conference will facilitate clearing up any remaining ambiguity in the Examiner's understanding of claims 10 or 19, Applicant's representative will be happy to discuss any such issues and can be contacted at the telephone number indicated below. Applicant respectfully requests a Notice of Allowance as soon as possible as this application has now been pending for some time.

Respectfully submitted,

CARLSON, GASKEY & OLDS

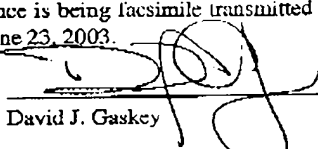
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Dated: June 23, 2003

CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being facsimile transmitted to Examiner Heba Elkassabgi, Patent and Trademark Office (Fax No. (703) 872-9319 on June 23, 2003.


David J. Gaskey

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